

IN THE CLAIMS:

Please AMEND claims 1-9 and 11-35, and

Please ADD claim 36 as shown below.

1. (Currently Amended) A method of ~~handing over a mobile node from a first access router to a second access router~~, comprising:

sending a request message from ~~the~~ a second access router to ~~the~~ a mobile node;
and

in response to the ~~received~~ request message, sending a connectivity report from the mobile node to the second access router,

wherein the sending the connectivity report comprises providing the second access router with information about ~~the~~ a first access router through the connectivity report; and handing over the mobile node from the first access router to the second access router.

2. (Currently Amended) The method of claim 1, further comprising:
~~where~~ prior to the sending the request message from the second access router to the mobile node, obtaining, by the mobile node, ~~obtains~~ connectivity with the second access router by moving into a geographic location associated with the second access router.

3. (Currently Amended) The method of claim 1, wherein the sending the connectivity report comprises sending ~~the connectivity report includes an IP-internet protocol~~ address of the first access router.

4. (Currently Amended) The method of claim 3, wherein the sending the connectivity report comprises sending ~~the connectivity report further includes an L2-a layer two~~ identifier of the first access router.

5. (Currently Amended) The method of claim 3, wherein the sending the connectivity report comprises sending ~~the connectivity report further includes an L2-a layer two~~ identifier of ~~a Access Point~~ an access point attached to the first access router.

6. (Currently Amended) The method of claim 1, wherein the sending the request message comprises selecting, by the second access router, ~~selecting one~~ mobile node from a plurality of mobile nodes ~~in order to send the request message~~.

7. (Currently Amended) The method of claim 6, wherein the selecting the one mobile node is comprises selected ~~selecting the one mobile node~~ randomly from the plurality of mobile nodes.

8. (Currently Amended) The method of claim 1, further comprising:

performing ~~handover of~~ the handing over the mobile node from the first access router to the second access router after sending the connectivity report.

9. (Currently Amended) The method of claim 1, further comprising:
performing ~~handover of~~ the handing over the mobile node from the first access router to the second access router before sending the connectivity report.

10. (Previously Presented) A method comprising:
moving a mobile node from a first geographic location associated with a first access router to a second geographic location associated with a second access router;
sending a request message from the second access router to the mobile node; and
sending a connectivity report from the mobile node to the second access router,
wherein the sending the connectivity report comprises providing the second access router with information about the first access router through the connectivity report.

11. (Currently Amended) The method of claim 10, further comprising:
~~where~~ prior to the sending the request message from the second access router to the mobile node, obtaining, by the mobile node, ~~obtains~~ connectivity with the second access router.

12. (Currently Amended) The method of claim 10, wherein the sending the connectivity report comprises sending ~~the connectivity report includes an IP-internet protocol~~ address of the first access router.

13. (Currently Amended) The method of claim 12, wherein the sending the connectivity report comprises sending ~~the connectivity report further includes an L2-a layer two~~ identifier of the first access router or ~~L2-a layer two~~ identifier of an access point connected to the first access router.

14. (Currently Amended) The method of claim 10, wherein the sending the request message comprises selecting, by the second access router, ~~selecting one mobile node from a plurality of mobile nodes in order to send the request message.~~

15. (Currently Amended) The method of claim 14, wherein the selecting the one mobile node comprises selecting the one mobile node ~~is selected randomly from the plurality of mobile nodes.~~

16. (Currently Amended) The method of claim 10, further comprising:
performing ~~handover of~~ the handing over the mobile node from the first access router to the second access router after sending the connectivity report.

17. (Currently Amended) The method of claim 10, further comprising:
performing ~~handover of~~ the handing over the mobile node from the first access router to the second access router before sending the connectivity report.

18. (Currently Amended) A mobile ~~IP~~ internet protocol network, comprising:
a first access router;
a second access router coupled to the first access router; and
a mobile node,
wherein the second access router is configured to send, upon the mobile node moving to a geographic location associated with the second access router, a request message to the mobile node requesting a connectivity report, and
wherein the mobile node is configured to provide the second access router with information about the first access router through the connectivity report.

19. (Currently Amended) The network of claim 18, wherein the mobile node ~~sends~~ is configured to send the connectivity report to the second access router in response to receiving the request message sent from the second access router.

20. (Currently Amended) The network of claim 19, wherein the connectivity report includes an ~~IP~~ internet protocol address of the first access router.

21. (Currently Amended) The network of claim 20, wherein the connectivity report further includes ~~an L2-a layer two~~ identifier of the first access router or ~~L2-a layer two~~ identifier of ~~an~~ access point connected to the first access router.

22. (Currently Amended) The network of claim 19, wherein the network is configured to hand ~~performs handover of~~ the mobile node over from the first access router to the second access router before the mobile node sends the connectivity report.

23. (Currently Amended) The network of claim 19, wherein the network ~~performs~~ is configured to hand ~~handover of~~ the mobile node over from the first access router to the second access router after the mobile node sends the connectivity report.

24. (Currently Amended) The network of claim 18, wherein the second access router ~~selects~~ is configured to select one mobile node from a plurality of mobile nodes ~~in order~~ to request the connectivity report.

25. (Currently Amended) The network of claim 24, wherein the second access router is configured to select the one mobile node ~~is selected~~ randomly from the plurality of mobile nodes.

26. (Currently Amended) An access router, comprising:

~~having a processor that executes~~ configured to execute computer-readable instructions for performing ~~a method of handing over a mobile node from another access router, the method comprising:~~

~~_____ performing handover of the~~ handing over a mobile node from ~~the another~~ access router;

~~_____ sending a request message from the access router to the mobile node; and~~

~~_____ receiving a connectivity report from the mobile node,~~

wherein the receiving the connectivity report comprises ~~being provided with the second access router with~~ receiving information about the ~~first another~~ access router ~~through the connectivity report.~~

27. (Currently Amended) The access router of claim 26, wherein the processor is configured to send the request message ~~is sent~~ after the mobile node moves from a first geographic location associated with the another access router to a second geographic location associated with the access router.

28. (Currently Amended) The access router of claim 26, wherein the processor is configured to perform the ~~performing handover~~ handing over the mobile node ~~occurs~~ prior to the receiving the connectivity report.

29. (Currently Amended) The access router of claim 26, wherein the processor is configured to perform the ~~performing handover~~ handing over the mobile node ~~occurs~~ after the receiving the connectivity report.

30. (Currently Amended) The access router of claim 26, wherein the sending the request message comprises ~~the access router~~ selecting one mobile node from a plurality of mobile nodes ~~in order~~ to send the request message.

31. (Currently Amended) The access router of claim 30, wherein the selecting the one mobile node is ~~selected~~ comprises selecting the mobile node randomly from the plurality of mobile nodes.

32. (Currently Amended) The method of claim 1, ~~wherein:~~ further comprising: obtaining, by the mobile node, ~~obtains IP-internet protocol connectivity with the second access router; and,~~

wherein the sending the request message is ~~sent~~ occurs after the obtaining, by the mobile node, ~~has obtained the IP-internet protocol connectivity with the second access router.~~

33. (Currently Amended) The method of claim 10, ~~wherein~~ further comprising:

obtaining, by the mobile node, obtains IP-internet protocol connectivity with the second access router; ~~and,~~

wherein sending the request message is sent occurs after the obtaining, by the mobile node, ~~has obtained the IP-internet protocol~~ connectivity with the second access router.

34. (Currently Amended) The mobile IP-internet protocol network of claim 18, wherein:

the mobile node is configured to obtains IP-internet protocol connectivity with the second access router; ~~and~~

the mobile node is configured to send the request message ~~is sent~~ after the mobile node has obtained the IP-internet connectivity with the second access router.

35. (Currently Amended) The access router of claim 26 wherein:

the mobile node ~~obtains~~ is configured to obtain IP-internet protocol connectivity with the ~~second~~ access router; ~~and~~

the processor is configured to perform the sending the request message is sent after the mobile node has obtained the IP-internet protocol connectivity with the ~~second~~ access router.

36. (Currently Amended) A mobile internet protocol network, comprising:

a first means for access routing;

a second means for access routing coupled to the first means for access routing;

and

a mobile means for communicating,

wherein the second means for access routing is configured to send, upon the mobile means for communicating moving to a geographic location associated with the second means for access routing, a request message to the mobile means for communicating requesting a connectivity report, and

wherein the mobile means for communicating is configured to provide the second means for access routing with information about the first means for access routing through the connectivity report.